

AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims, in which claims 82 through 85 have been canceled without prejudice or disclaimer, claims 23, 40, 42 through 45, 55, 58, 72, 74, 75, 77 through 80, 96, 97, 99 through 102, 119, and 121 through 123 have been amended, and new claims 124 through 130 have been added.

1. - 22. (Canceled)

23. (Currently Amended) An apparatus comprising:

at least one processor; and

at least one memory including computer program code for one or more programs,

the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform at least the following,

[[send]] determine to transmit an upload request for content from an apparatus via a network to a recipient, ~~the upload request comprising a request to upload content from the apparatus to the recipient, wherein~~ the content comprising a plurality of data packets;

receive from the recipient in response to the upload request, an upload schedule relating to at least one of a time and a manner of uploading the content in an upload session;

determine to upload the content to the recipient in accordance with the upload schedule;

after an interruption occurs in the upload session ~~while uploading one of the plurality of data packets~~, receive a list of completely uploaded data packet identifiers each of which uniquely identifies one corresponding data packet within the upload session ~~an instruction to resume the upload session, the instruction including an identifier of the content and a pointer to the one interrupted packet~~; and

reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded.

24. (Previously Presented) An apparatus according to Claim 23, wherein the apparatus is further caused to:

delete the content from the memory after uploading the content to the recipient.

25. (Previously Presented) An apparatus according to Claim 23, wherein the upload schedule includes at least one instruction dependent upon a state of at least one of the recipient or the apparatus, and wherein the apparatus is further caused to:

receive information reflecting a current state of at least one of the recipient or the apparatus before uploading the content, wherein the apparatus uploads the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state of at least one of the recipient or the apparatus.

26. (Previously Presented) An apparatus according to Claim 25, wherein the apparatus is further caused to receive information including at least one of a connectivity, location, actual movement or predicted movement of at least one of the recipient or the apparatus.

27. (Previously Presented) An apparatus according to Claim 23, wherein the upload schedule includes at least one instruction dependent upon a state of at least one network over which the content is uploaded, and wherein the apparatus is further caused to:

receive information reflecting a current state of the at least one network before uploading the content, wherein the content is uploaded based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of the at least one network.

28. (Previously Presented) An apparatus according to Claim 27, wherein the information includes at least one of traffic on the at least one network or bandwidth available to at least one of the recipient or the apparatus on the at least one network.

29. (Previously Presented) An apparatus according to Claim 23, wherein the upload schedule includes at least one instruction defining processing the content, and wherein the apparatus is further caused to: process the content, and upload the processed content.

30. (Previously Presented) An apparatus according to Claim 29, wherein the apparatus processes the content by at least one of transcoding or truncating at least a portion of the content.

31. (Previously Presented) An apparatus according to Claim 29, wherein the apparatus processes the content by breaking up the upload content into a plurality of portions.

32. (Previously Presented) An apparatus according to Claim 23, wherein the upload schedule includes at least one instruction defining at least one deadline for uploading the content, and wherein the content is uploaded based upon the at least one deadline.

33. (Previously Presented) An apparatus according to Claim 23, wherein the content includes a plurality of pieces, wherein the upload schedule includes at least one instruction

comprising an ordering of the plurality of pieces of the content, and wherein at least a portion of the content is uploaded based upon the ordering of the plurality of pieces of the content.

34. (Previously Presented) An apparatus according to Claim 23, wherein the upload schedule includes at least one instruction based upon the content and at least one network over which the content is uploaded, and wherein the content is uploaded based upon the content and the at least one network.

35. (Previously Presented) An apparatus according to Claim 23, wherein the upload schedule includes at least one instruction based upon at least one upload time of the content determined based upon the content and at least one network over which the content is uploaded, and wherein the content is uploaded based upon the at least one upload time.

36. (Previously Presented) An apparatus according to Claim 23, the apparatus is further caused to:

receive a trigger to send an upload request, wherein the upload request is sent in response to the trigger independent of interaction from a user of the apparatus.

37. (Previously Presented) An apparatus according to Claim 23, wherein the upload request is sent with an upload descriptor that enables at least one of the apparatus or the recipient to determine if an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and if an interruption occurs in uploading the plurality of data packets, enables the recipient to recover the content.

38. (Previously Presented) An apparatus according to Claim 23, wherein the apparatus is further caused to delete the uploaded content from a storage of the sender without interaction with a user of the sender, after completing the upload session.

39. (Previously Presented) An apparatus according to Claim 23, wherein uploading the content comprises uploading the plurality of data packets and at least one information packet regarding at least one group of at least one data packet.

40. (Currently Amended) An apparatus according to Claim 39, wherein the apparatus is further caused to upload the at least one information packet that enables the recipient to monitor the uploaded data packets to determine, based upon at least one information packet, the at least one information packet including information of a number of data packets to be received between the at least one information packet and an information packet immediate before or after the at least one information packet, if an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and if an interruption occurs in uploading the plurality of data packets, to thereby enable the recipient to recover the content such that the recipient receives the plurality of data packets.

41. (Previously Presented) An apparatus according to Claim 23, wherein the apparatus is further caused to determine if an interruption occurs in uploading the content such that the recipient only receives a portion of the content, and

if an interruption occurs in uploading the content, the apparatus is further caused to:

receive a length of the received portion of the content, and thereafter upload a remaining portion of the content to the recipient.

42. (Currently Amended) An apparatus according to Claim 41, wherein the remaining portion of the content is uploaded based upon ~~[[a]]~~ one or more bit ranges corresponding to a list of one or more packet identifiers of the remaining one or more packets ~~portion of the content~~.

43. (Currently Amended) An apparatus according to Claim 41, wherein the length of the received portion of the content is received in accordance with a hypertext transfer protocol (HTTP) HEAD technique, and the remaining portion of the content is uploaded in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining portion of the content including header information comprising ~~[[a]]~~ one or more bit ranges corresponding to a list of one or more packet identifiers of the remaining one or more packets ~~portion of the content~~.

44. (Currently Amended) An apparatus according to Claim 23, wherein the apparatus is further caused to send a hypertext transfer protocol (HTTP) HEAD request to the recipient, and the remaining packets are uploaded in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining packets including header information comprising a list of one or more packet identifiers ~~range~~ of the remaining one or more packets.

45. (Currently Amended) An apparatus comprising:
at least one processor; and
at least one memory including computer program code for one or more programs,
the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform at least the following,

receive an upload request for content from a sender via a network, wherein ~~the upload request comprises a request to upload content from the sender to the apparatus~~, the content comprising a plurality of data packets;

determine, in response to the request, an upload schedule relating to at least one of a time and a manner of the sender uploading the content to the apparatus in an upload session;

[[and]]

receive ~~an upload descriptor of the content and~~ the content from the sender in accordance with the upload schedule, ~~the upload descriptor including a size of the content~~;

track during the upload session received data packets and assembling a list of completely uploaded data packet[[s]] identifiers each of which uniquely identifies one corresponding data packet within the upload session ~~during the upload session~~; and

after an interruption occurs in the upload session ~~while uploading one of the plurality of data packets~~, ~~reestablish the upload session based upon the upload descriptor and~~ determine to transmit the list of completely uploaded data packet[[s]] identifiers ~~to receive the sender for transmitting to the apparatus~~ each of the remaining packets that is not completely uploaded.

46. (Previously Presented) An apparatus according to Claim 45, wherein the upload schedule includes at least one instruction dependent upon a state of at least one of the apparatus or the sender, and wherein the content is received based upon the at least one instruction dependent upon the state of at least one of the apparatus or the sender, and information reflecting a current state of at least one of the apparatus or the sender, the sender having received the information reflecting the current state before uploading the content to the apparatus.

47. (Previously Presented) An apparatus according to Claim 45, wherein the upload schedule includes at least one instruction dependent upon a state of at least one network over which the content is uploaded, and the content is received based upon the at least one instruction dependent upon the state of the at least one network, and information reflecting a current state of the at least one network, the sender having received the information reflecting the current state before uploading the content to the apparatus.

48. (Previously Presented) An apparatus according to Claim 45, wherein the upload schedule includes at least one instruction defining processing the content to thereby direct the sender to process the content, and the processed content is received.

49. (Previously Presented) An apparatus according to Claim 45, wherein the upload schedule includes at least one instruction defining at least one deadline for uploading the content, and the content is received based upon the at least one deadline.

50. (Previously Presented) An apparatus according to Claim 45, wherein the content includes a plurality of pieces, and wherein determining an upload schedule comprises the upload schedule includes an ordering of the plurality of pieces of the content, and at least a portion of the content is received based upon the ordering of the plurality of pieces of the content.

51. (Previously Presented) An apparatus according to Claim 45, wherein the upload schedule includes at least one instruction based upon the content and at least one network over which the content is uploaded, and the content is received based upon the content and the at least one network.

52. (Previously Presented) An apparatus according to Claim 45, wherein the upload schedule includes at least one instruction based upon at least one upload time of the content, and the content is received based upon the at least one upload time, the at least one upload time of the content being determined based upon the content and at least one network over which the content is uploaded.

53. (Previously Presented) An apparatus according to Claim 45, wherein the apparatus is further caused to

receive an upload descriptor and thereafter receiving the plurality of data packets, determine if an interruption occurs in uploading the plurality of data packets such that the apparatus receives less than the plurality of data packets of the content; and if an interruption occurs in uploading the plurality of data packets, recover the content based upon the upload descriptor.

54. (Previously Presented) An apparatus according to Claim 53, wherein recovering the content comprises:

determining at least one remaining data packet to be uploaded to the apparatus to thereby complete uploading of the plurality of data packets of the content; instructing the sender to send the at least one remaining data packet; and receiving the at least one remaining data packet such that the apparatus receives the plurality of data packets.

55. (Currently Amended) An apparatus according to Claim ~~[[45]]~~53, wherein the apparatus is further caused to push the upload schedule to the sender thereby automatically

uploading the content in accordance with the upload schedule, the upload descriptor includes information of a preferred time, place and technology for uploading the content, and the upload session is interrupted by user intervention.

56. (Previously Presented) An apparatus according to Claim 45, wherein the apparatus is further caused to:

monitor the uploaded data packets to determine, based upon at least one information packet, if an interruption occurs in uploading the plurality of data packets such that the apparatus receives less than the plurality of data packets of the content; and if an interruption occurs in uploading the plurality of data packets, recover the content such that the apparatus receives the plurality of data packets.

57. (Previously Presented) An apparatus according to Claim 45, wherein the apparatus is further caused to:

determine an interruption occurs in uploading the content when the apparatus only receives a portion of the content; if an interruption occurs in uploading the content, send to the sender a length of the received portion of the content to thereby enable the sender to thereafter upload a remaining portion of the content; and receive a remaining portion of the content to thereby recover the content such that the apparatus receives all of the content.

58. (Currently Amended) A method comprising:

~~causing, at least in part, reception of~~ receiving an upload request for content from a sender via a network at an apparatus, wherein ~~the upload request comprises a request to upload content from the sender to the apparatus,~~ the content comprising a plurality of data packets;

determining ~~at the apparatus,~~ in response to the request, an upload schedule relating to at least one of a time and a manner of the sender uploading the content to the apparatus in an upload session; [[and]]

~~causing, at least in part, reception of an upload descriptor of the content and~~ receiving the content from the sender at the apparatus in accordance with the upload schedule, ~~the upload descriptor including a size of the content;~~

tracking at the apparatus during the upload session received data packets and assembling a list of completely uploaded data packet[[s]] identifiers each of which uniquely identifies one corresponding data packet within the upload session ~~during the upload session at the apparatus;~~ and

after an interruption occurs in the upload session ~~while uploading one of the plurality of data packets,~~ ~~reestablishing by the apparatus the upload session based upon the upload descriptor and~~ determining to transmit the list of completely uploaded data packet[[s]] identifiers from the apparatus to receive the sender for transmitting to the apparatus each of the remaining packets that is not completely uploaded.

59. (Canceled)

60. (Previously Presented) A method according to Claim 58, wherein the upload schedule includes at least one instruction dependent upon a state of at least one of the apparatus or the

sender, and wherein the content is received based upon the state of at least one of the apparatus or the sender, and information reflecting a current state of at least one of the apparatus or the sender, the sender having received the information reflecting the current state before uploading the content to the apparatus.

61. (Previously Presented) A method according to Claim 60, wherein the state of at least one of the apparatus or the sender comprises at least one of a connectivity, location, actual movement or predicted movement of at least one of the apparatus or the sender.

62. (Previously Presented) A method according to Claim 58, wherein the upload schedule includes at least one instruction dependent upon a state of at least one network over which the content is uploaded, and wherein the content is received based upon the state of the at least one network, and information reflecting a current state of the at least one network, the sender having received the information reflecting the current state before uploading the content to the apparatus.

63. (Previously Presented) A method according to Claim 62, wherein the state of the at least one network comprises at least one of traffic on the at least one network or bandwidth available to at least one of the apparatus or the sender on the at least one network.

64. (Previously Presented) A method according to Claim 58, wherein the upload schedule includes at least one instruction defining processing the content, and wherein receiving the content comprises receiving the processed content.

65. (Previously Presented) A method according to Claim 64, wherein the upload schedule includes at least one instruction defining at least one of transcoding or truncating at least a portion of the content, and wherein receiving the content comprises receiving the at least one of the transcoded or truncated portion of the content.

66. (Previously Presented) A method according to Claim 64, wherein the upload schedule includes at least one instruction defining breaking up the upload content into a plurality of portions, and wherein receiving the content comprises receiving the portions of the upload content.

67. (Previously Presented) A method according to Claim 58, wherein the upload schedule includes at least one instruction defining at least one deadline for uploading the content, and wherein the content is received based upon the at least one deadline.

68. (Previously Presented) A method according to Claim 58, wherein the content includes a plurality of pieces, wherein the upload schedule includes at least one instruction comprising an ordering of the plurality of pieces of the content, and wherein receiving the content comprises receiving at least a portion of the content based upon the ordering of the plurality of pieces of the content.

69. (Previously Presented) A method according to Claim 58, wherein the upload schedule includes at least one instruction dependent based upon the content and at least one network over which the content is uploaded, and wherein the content is received based upon the content and the at least one network.

70. (Previously Presented) A method according to Claim 58, wherein the upload schedule includes at least one instruction dependent based upon at least one upload time of the content determined based upon the content and at least one network over which the content is uploaded, and wherein the content is received based upon the at least one upload time.

71. (Previously Presented) A method according to Claim 58 further comprising:
sending a trigger to the sender to send an upload request before receiving the upload request,
wherein an upload request is received in response to the trigger independent of interaction from a user of the sender.

72. (Currently Amended) A method according to Claim 58, further comprising:
determining an interruption occurs in uploading the plurality of data packets when the apparatus receives less than the plurality of data packets of the content; and
if an interruption occurs in uploading the plurality of data packets, recovering the content based upon the ~~upload descriptor~~ list such that the apparatus receives the plurality of data packets.

73. (Previously Presented) A method according to Claim 72, wherein recovering the content comprises:
determining at least one remaining data packet to be received at the apparatus to thereby complete uploading of the plurality of data packets of the content;
instructing the sender to send the at least one remaining data packet; and
receiving the at least one remaining data packet such that the apparatus receives all of the content.

74. (Currently Amended) A method according to Claim [[58]] 124, further comprising: pushing the upload schedule to the sender thereby automatically uploading the content in accordance with the upload schedule, wherein the upload descriptor includes information of a preferred time, place and technology for uploading the content, and the upload session is interrupted by user intervention.

75. (Currently Amended) A method according to Claim 58, further comprising: monitoring the received data packets to determine, based upon at least one information packet, the at least one information packet including information of a number of data packets to be received between the at least one information packet and an information packet immediate before or after the at least one information packet, if an interruption occurs in uploading the plurality of data packets such that the apparatus receives less than the plurality of data packets of the content; and if an interruption occurs in uploading the plurality of data packets, recovering the content such that the apparatus receives the plurality of data packets.

76. (Previously Presented) A method according to Claim 58 further comprising: determining an interruption occurs in uploading the content when the apparatus only receives a portion of the content; if an interruption occurs in uploading the content, sending a length of the received portion of the content to the sender; and receiving a remaining portion of the content to thereby recover the content such that the apparatus receives all of the content.

77. (Currently Amended) A method according to Claim 76, wherein receiving a remaining portion of the content comprises receiving a remaining portion of the content based upon ~~[[a]]~~ one or more bit ranges corresponding to a list of one or more packet identifiers of the remaining one or more packets ~~portion of the content~~.

78. (Currently Amended) A method according to Claim 76, wherein sending a length of the received portion of the content comprises sending a length of the received portion of the content in accordance with a hypertext transfer protocol (HTTP) HEAD technique, and the remaining portion of the content is received in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes receiving the remaining portion of the content including header information that includes ~~[[a]]~~ one or more bit ranges corresponding to a list of one or more packet identifiers of the remaining one or more packets ~~portion of the content~~.

79. (Currently Amended) A method according to Claim 58, further comprising receiving a hypertext transfer protocol (HTTP) HEAD request from the sender at the apparatus, wherein receiving a remaining portion of the content comprises receiving the remaining packets in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes receiving the remaining packets including header information comprising a list of one or more packet identifiers ~~range~~ of the remaining one or more packets.

80. (Currently Amended) A computer program product for uploading content, the computer program product comprising at least one computer-readable storage medium having

computer-readable program code portions stored therein that in response to execution by a processor, cause an apparatus to at least perform the following:

receiving an upload request for content from a sender via a network, wherein ~~the upload request comprises a request to upload content from the sender to the apparatus, the~~ content comprising a plurality of data packets;

determining, in response to the request, an upload schedule relating to at least one of a time and a manner of the sender uploading the content to the apparatus in an upload session; [[and]]

receiving ~~an upload descriptor of the content and~~ the content from the sender in accordance with the upload schedule, ~~the upload descriptor including a size of the content;~~

tracking during the upload session received data packets and assembling a list of completely uploaded data packet[[s]] identifiers each of which uniquely identifies one corresponding data packet within the upload session ~~during the upload session;~~ and

after an interruption occurs in the upload session ~~while uploading one of the plurality of data packets, reestablishing the upload session based upon the upload descriptor and~~ determining to transmit the list of completely uploaded data packet[[s]] identifiers to ~~receive~~ the sender for transmitting to the apparatus each of the remaining packets that is not completely uploaded.

81. - 85. (Canceled)

86. (Previously Presented) A computer program product according to Claim 80, wherein the upload schedule includes at least one instruction defining processing the content to thereby direct the sender to process the content, and the processed content is received.

87. (Previously Presented) A computer program product according to Claim 86, wherein the upload schedule includes at least one instruction defining at least one of transcoding or truncating at least a portion of the content, and wherein receiving the content comprises receiving the at least one of the transcoded or truncated portion of the content.

88. (Previously Presented) A computer program product according to Claim 86, wherein the upload schedule includes at least one instruction defining breaking up the upload content into a plurality of portions, and wherein receiving the content comprises receiving the portions of the upload content.

89. (Previously Presented) A computer program product according to Claim 80, wherein the upload schedule includes at least one instruction defining at least one deadline for uploading the content, and the content is received based upon the at least one deadline.

90. (Previously Presented) A computer program product according to Claim 80, wherein the content includes a plurality of pieces, and wherein determining an upload schedule comprises the upload schedule includes an ordering of the plurality of pieces of the content, and at least a portion of the content is received based upon the ordering of the plurality of pieces of the content.

91. (Previously Presented) A computer program product according to Claim 80, wherein the upload schedule includes at least one instruction based upon the content and at least one network over which the content is uploaded, and the content is received based upon the content and the at least one network.

92. (Previously Presented) A computer program product according to Claim 80, wherein the upload schedule includes at least one instruction based upon at least one upload time of the content determined based upon the content and at least one network over which the content is uploaded, and the content is received based upon the at least one upload time.

93. (Previously Presented) A computer program product according to Claim 80, wherein the apparatus is caused to further perform:

 sending a trigger to the sender to send an upload request before receiving the upload request, wherein an upload request is received in response to the trigger independent of interaction from a user of the sender.

94. (Previously Presented) A computer program product according to Claim 80, wherein the apparatus is caused to further perform:

 receiving an upload descriptor and thereafter receiving the content, determining if an interruption occurs in uploading the plurality of data packets such that the apparatus receives less than the plurality of data packets of the content; and
 if an interruption occurs in uploading the plurality of data packets, recovering the content based upon the upload descriptor.

95. (Previously Presented) A computer program product according to Claim 94, wherein recovering the content comprises:

 determining at least one remaining data packet to be received at the apparatus to thereby complete uploading of the plurality of data packets of the content;
 instructing the sender to send the at least one remaining data packet; and

receiving the at least one remaining data packet such that the apparatus receives all of the content.

96. (Currently Amended) A computer program product according to Claim ~~[[80]]~~94, wherein the apparatus is caused to further perform: pushing the upload schedule to the sender thereby automatically uploading the content in accordance with the upload schedule, wherein the upload descriptor includes information of a preferred time, place and technology for uploading the content, and the upload session is interrupted by user intervention.

97. (Currently Amended) A computer program product according to Claim 96, wherein the apparatus is caused to further perform:

monitoring the received data packets to determine, based upon at least one information packet, the at least one information packet including information of a number of data packets to be received between the at least one information packet and an information packet immediate before or after the at least one information packet, if an interruption occurs in uploading the plurality of data packets such that the apparatus receives less than the plurality of data packets of the content; and

if an interruption occurs in uploading the plurality of data packets, recovering the content such that the apparatus receives the plurality of data packets.

98. (Previously Presented) A computer program product according to Claim 80, wherein the apparatus is caused to further perform:

determining an interruption occurs in uploading the content when the apparatus only receives a portion of the content;

if an interruption occurs in uploading the content, sending a length of the received portion of the content to the sender; and
receiving a remaining portion of the content to thereby recover the content.

99. (Currently Amended) A computer program product according to Claim 98, wherein the remaining portion of the content is received based upon [[a]] one or more bit ranges corresponding to a list of one or more packet identifiers of the remaining one or more packets ~~portion of the content~~.

100. (Currently Amended) A computer program product according to Claim 98, wherein sending a length of the received portion of the content comprises sending a length of the received portion of the content in accordance with a hypertext transfer protocol (HTTP) HEAD technique, and the remaining portion of the content is received in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes receiving the remaining portion of the content including header information that includes [[a]] one or more bit ranges corresponding to a list of one or more packet identifiers of the remaining one or more packets ~~portion of the content~~.

101. (Currently Amended) A computer program product according to Claim 100, further comprising receiving a hypertext transfer protocol (HTTP) HEAD request from the sender at the apparatus, wherein receiving a remaining portion of the content comprises receiving the remaining packets in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes receiving the remaining packets

including header information comprising a list of one or more packet identifiers ~~range~~ of the remaining one or more packets.

102. (Currently Amended) A method comprising:

~~causing, at least in part, by an apparatus transmission of~~ determining to transmit an upload request for content from an apparatus via a network to a recipient, ~~the upload request comprising a request to upload content from the apparatus to the recipient, wherein~~ the content comprising a plurality of data packets;

~~causing, at least in part, reception~~ receiving from the recipient at the apparatus, in response to the upload request, an upload schedule relating to at least one of a time and a manner of uploading the content in an upload session;

~~uploading by~~ determining by the apparatus to upload the content to the recipient in accordance with the upload schedule;

after an interruption occurs in the upload session ~~while uploading one of the plurality of data packets, causing, at least in part, reception of an instruction~~ receiving at the apparatus a list of completely uploaded data packet identifiers each of which uniquely identifies one corresponding data packet within the upload session ~~to resume the upload session, the instruction including an identifier of the content and a pointer to the one interrupted packet;~~ and

reestablishing by the apparatus the upload session to upload to the recipient each of the remaining packets that is not completely uploaded.

103. (Previously Presented) A method according to Claim 102, further comprising deleting the content from the memory after uploading the content to the recipient.

104. (Previously Presented) A method according to Claim 102, wherein the upload schedule includes at least one instruction dependent upon a state of at least one of the recipient or the apparatus, and wherein the method further comprising receiving information reflecting a current state of at least one of the recipient or the apparatus before uploading the content to thereby enable the apparatus to upload the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of at least one of the recipient or the apparatus.

105. (Previously Presented) A method according to Claim 104, further comprising receiving information reflecting a current state comprising at least one of a connectivity, location, actual movement or predicted movement of at least one of the recipient or the apparatus.

106. (Previously Presented) A method according to Claim 102, wherein the upload schedule includes at least one instruction dependent upon a state of at least one network over which the content is uploaded, and wherein the method further comprising receiving information reflecting a current state of the at least one network before uploading the content to thereby enable the apparatus to upload the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of the at least one network.

107. (Previously Presented) A method according to Claim 106, further comprising receiving information comprising at least one of traffic on the at least one network or bandwidth available to at least one of the recipient or the apparatus on the at least one network.

108. (Previously Presented) A method according to Claim 102, wherein the upload schedule includes at least one instruction defining processing the content, and wherein the method further comprising processing the content thereby uploading the processed content.

109. (Previously Presented) A method according to Claim 108, further comprising at least one of transcoding and truncating at least a portion of the content thereby uploading the at least one of the transcoded or truncated portion of the content.

110. (Previously Presented) A method according to Claim 108, further comprising breaking up the upload content into a plurality of portions to thereby uploading the portions of the upload content.

111. (Previously Presented) A method according to Claim 102, wherein the upload schedule includes at least one instruction defining at least one deadline for uploading the content, and wherein the method further comprising uploading the content based upon the at least one deadline.

112. (Previously Presented) A method according to Claim 102, wherein the content includes a plurality of pieces, wherein the upload schedule includes at least one instruction comprising an ordering of the plurality of pieces of the content, and wherein the method further comprising uploading at least a portion of the content based upon the ordering of the plurality of pieces of the content.

113. (Previously Presented) A method according to Claim 102, wherein the upload schedule includes at least one instruction based upon the content and at least one network over which the content is uploaded, and wherein the method further comprising uploading the content based upon the content and the at least one network.

114. (Previously Presented) A method according to Claim 102, wherein the upload schedule includes at least one instruction based upon at least one upload time of the content determined based upon the content and at least one network over which the content is uploaded, and wherein the method further comprising uploading the content based upon the at least one upload time.

115. (Previously Presented) A method according to Claim 102, further comprising receiving a trigger to send an upload request before sending the upload request, and sending the upload request in response to the trigger independent of interaction from a user of the sender.

116. (Previously Presented) A method according to Claim 102, further comprising sending an upload descriptor and thereafter uploading the content, determining if an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and

if an interruption occurs in uploading the plurality of data packets, enabling the recipient to recover the content based upon the upload descriptor such that the recipient receives the plurality of data packets.

117. (Previously Presented) A method according to Claim 116, further comprising deleting the uploaded content from a storage of the sender without interaction with a user of the sender, after completing the upload session.

118. (Previously Presented) A method according to Claim 102, wherein the content comprises a plurality of data packets, and wherein the method further comprising uploading the plurality of data packets and at least one information packet regarding at least one group of at least one data packet.

119. (Currently Amended) A method according to Claim 118, further comprising:
uploading the at least one information packet that enables the recipient to monitor the uploaded data packets to determine, based upon at least one information packet, the at least one information packet including information of a number of data packets to be received between the at least one information packet and an information packet immediate before or after the at least one information packet, if an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and
if an interruption occurs in uploading the plurality of data packets, recovering the content such that the recipient receives the plurality of data packets.

120. (Previously Presented) A method according to Claim 102, further comprising:
determining if an interruption occurs in uploading the content such that the recipient only receives a portion of the content, and

if an interruption occurs in uploading the content, receiving a length of the received portion of the content to thereby uploading a remaining portion of the content to the recipient.

121. (Currently Amended) A method according to Claim 120, further comprising uploading a remaining portion of the content based upon ~~[[a]]~~ one or more bit ranges corresponding to a list of one or more packet identifiers of the remaining one or more packets ~~portion of the content~~.

122. (Currently Amended) A method according to Claim 120, further comprising receiving a length of the received portion of the content in accordance with a hypertext transfer protocol (HTTP) HEAD technique; and uploading the remaining portion of the content in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining portion of the content including header information comprising ~~[[a]]~~ one or more bit ranges corresponding to a list of one or more packet identifiers of the remaining one or more packets ~~portion of the content~~.

123. (Currently Amended) A method according to Claim 122, further comprising: sending a hypertext transfer protocol (HTTP) HEAD request to the recipient; and uploading the remaining packets are uploaded in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining packets including header information comprising a list of one or more packet identifiers ~~range~~ of the remaining one or more packets.

124. (New) A method according to Claim 58, further comprising:

receiving an upload descriptor of the content from the sender via the network at the apparatus in accordance with the upload schedule, the upload descriptor including a size of the content; and
reestablishing by the apparatus the upload session further based upon the upload descriptor.

125. (New) A method according to Claim 124, further comprising:

determining an interruption occurs in uploading the plurality of data packets when the apparatus receives less than the plurality of data packets of the content; and
if an interruption occurs in uploading the plurality of data packets, recovering the content based upon the upload descriptor such that the apparatus receives the plurality of data packets.

126. (New) A method according to Claim 78, wherein the at least one information packet further includes information uniquely describing the data packets before or after the information packet.

127. (New) A method according to Claim 126, wherein information uniquely describing the data packets includes a sequence of packet cyclic redundancy checks.

128. (New) A method according to Claim 78, wherein the number of data packets to be received between two information packets varies.

129. (New) A method according to Claim 58, wherein the network includes a cellular network.

130. (New) A method according to Claim 102, further comprising: after the interruption, receiving at the apparatus an instruction to reestablish the upload session, the instruction including an identifier of the content and an identifier of the one interrupted packet.